

Policy & Procedure (P& P)

Policy Title:

Anti-A1 Typing

Department	Index No.	Scope All Laboratory staff	
Laboratory & Blood Bank	LAB-063		
Issue Date	Revision NO	Effective Date	
1437/06/12	3	1440/07/23	
Review Due Date	Related Standard NO.	Page Number#	
1442/07/23	CBAHI (LB. 50)	3	

01. Policy:

01.1. The blood bank confirms all specimens suspected to be A2 or A2B blood sub-groups using the anti-A1 lectin.

02. Definition:

02.1. N/A

03. Purpose:

03.1. All specimens where A2 or A2B blood group is suspected is confirmed with anti-A1 lectin.

04. Procedure:

04.1. Specimen Requirements

Blood collected with anticoagulant is used.

Specimens collected in CPD, CPDA-1, sodium citrate, oxalate, EDTA, or heparin are all acceptable.

Testing should be performed as soon as possible.

If a delay in testing occurs, specimens should be stored at 2-8 degrees centigrade and tested within 48 hours.

No patient preparation is required.

04.2. Materials

- 04.2.1. Glass test tubes
- 04.2.2. Blood Bank pipettes
- 04.2.3. Isotonic saline 0.85% NaCl

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- 04.2.4. Calibrated serologic centrifuge
- 04.2.5. Microscope and slides

04.3. Reagents

04.3.1. Anti-A1 Lectin

04.4. Method

- 04.4.1. Wash an appropriate volume of patient red blood cells two times with isotonic saline.
- 04.4.2. Prepare a 3% to 5% suspension of red blood cells in isotonic saline.
- 04.4.3. To a labeled test tube add one drop of anti-A1 lectin.
- 04.4.4. Using a plastic pipette add one drop of the patient's cell suspension
- 04.4.5. Mix well and centrifuge according to the optimum saline spin time listed for the centrifuge.
- 04.4.6. Resuspend the cells by gentle agitation and examine macroscopically and microscopically.
- 04.4.7. Record results on worksheet.

04.5. Quality Control

Reagents are to be tested with appropriate positive and negative controls daily and the results recorded. See "Daily Quality Control" for procedure.

04.6. Reporting Results:

04.6.1. Interpretation

Agglutination of the red cells is a positive test result and indicates the presence of A1 antigen.

No agglutination is a negative test result and indicates the absence of the A1 antigen and the blood group is A2 or A2B.

Reactions should show the following pattern with group A red blood cells.

Anti-A1 Lectin	Interpretation	
+	A1	
	A2	

04.7. Limitations:

04.7.1. Testing must always be performed at room temperature (200 to 300 C) and never incubated at higher



temperatures.

- 04.7.2. The A1 antigen is not fully expressed on the red blood cells of newborn infants and false negative results may occur
- 04.7.3. Leukemia may produce a weekend form of A.

05. Responsibilities:

05.1. All laboratory of Al-Qunfudah General Hospital.

06. Equipment & Forms

06.1. Blood Grouping Book

07. Attachment:

07.1. N/A

08. Reference

08.1. The Technical manual of the American Association of Blood Banks.

Preparation, Reviewing & Approval Box

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